



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,258	07/30/2001	Mauro Fantin	35051/GM/cb	8666
7590	03/03/2005		EXAMINER	
MODIANO & ASSOCIATI Via Meravigli, 16 MILANO, 20123 ITALY			MERED, HABTE	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/916,258	FANTIN, MAURO
	Examiner Habte Mered	Art Unit 2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1-10 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 30 July 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. 6) <input type="checkbox"/> Other: _____	

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-3 and 6-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Gerszberg et al (US 6,510,152), hereinafter referred to as Gerszberg.**
3. Regarding **claim 1**, Gerszberg discloses a device for recognizing and assigning priorities to data packets for telecommunications networks (**Figure 5, element 22, Intelligent Service Director/Integrated Residential Gateway; Column 14, Lines 18-25 and 37-38; Column 17, Lines 25-48**), comprising switching means (**Figure 2, element 106 router; Column 8, Lines 1-5; Column 12, Lines 52-55**; the switching means described by the applicant only routes data from point A to point B and therefore has the same functionalities as a router. This specific router routes data to various ports of the ISD/IRG) which are adapted to divide data packets that arrive from an operator network connected thereto and to route them according to packet type (**Column 17, Lines 25-48; Column 18, Lines 25-30 and 65-67**; The packet types discriminated by Gerszberg's system are identical to that of the applicant's and are namely video, data, and voice.), said switching means being

connected to voice data processing means (**Column 15, Lines 5-6 and 10-22**) and to a plurality of outputs (**Column 5, Lines 52-55**) which allow to connect apparatuses for processing said data.

4. Regarding **claim 2**, Gerszberg discloses a system wherein said switching means are provided with memory means. (**Figure 2, elements 103-106; Column 7, Lines 65-67; and Column 17, Lines 25-30.**)

5. Regarding **claim 3**, Gerszberg discloses a system wherein said voice data processing means comprise voice data processor means provided with memory means and digital signal processing means provided with corresponding memory means. (**Column 15, Lines 5-20; Processor 102 includes signal co-processor 102 A and in Figure 2 has memory elements 103-105.**)

6. Regarding **claim 6**, Gerszberg discloses an apparatus adapted to be placed in input to a building to be served, comprising a device according to claim 1. (**Column 7, Lines 54-56 and Column 14, Lines 6-10.**)

7. Regarding **claim 7**, Gerszberg discloses an apparatus according to claim 6, comprising an interface between a telecommunications network and said device, said device being further connected bidirectionally to an additional interface for broadband services. (**Column 16, Lines 59-65;Element 26 in Figure 5;The interface between the network and the ISD/IRG is the protector. Also the protocol interface in the controller in element 510 in Fig. 5 can be also be considered an interface; Fig. 1E, element 19-1 is cable TV service delivered via fiber optics and is broadband service. Column 5, Lines 64-67 and Column 6, Lines 45-48.The device is bi-**

**directional as both upstream and downstream communication is supported. An example of a bi-directional communication will be web TV as shown in Figure 8. )**

8. Regarding claim 8, Gerszberg discloses an apparatus adapted to interface a telecommunications network, to decode voice services internally, and to provide data to peripheral units, comprising a device according to claim 1. (**Column 16, Lines 1-20; Figures 1A, 1C, 1E, 2, 5, 8, 9, and 10 show voice services being decoded internally in element 22, i.e. Intelligent Service Director/Integrated Residential Gateway, and data provided to peripheral units in appropriate formats. In particular Figure 8 shows how the different voice services like ISDN and analog are separately handled in the ISD/IRG (element 22).)**

9. Regarding claim 9, Gerszberg discloses a video decoder, comprising a device according to claim 1. (**Column 22, Lines 43-54 and Column 23, Lines 54-60**)

10. Regarding claim 10, Gerszberg discloses a personal computer, comprising a device according to claim 1. (**Figure 5, element 14 A; Column 14, Lines 32-40; Column 9, Lines 28-32. The ISD/IRG can be configured like a server too making it comparable to a fully equipped pc that meets all the limitations of claim 1.)**

#### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2662

12. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerszberg et al (US 6,510,152), hereinafter referred to as Gerszberg, in view of Mannette et al (US 6,816,500), hereinafter referred to as Mannette.

13. Regarding **claim 4**, Gerszberg teaches all aspects of the claimed invention as set forth in the rejection of claims 1 and 3 but fails to expressly teach the DSP interfaces with an encoder.

Mannette discloses a system wherein said digital signal processing means are interfaced bidirectionally with a bus with which encoder means, adapted to convert telephone signals from analog to digital and from digital to analog, are interfaced.

**(Figure 4, elements 340 and 360; Column 16, Lines 19-35; The CODEC have A/D and D/A conversion functionality and interface to the DSP via a bus (Figure 4, element 380). The bus has to be bi-directional as full duplex communication between the far end (central office) and the subscriber is supported. )**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Gerszberg's embodiment to have an encoder to convert telephone signals from digital to analog and vice versa. The motivation is a desire to provide a level or quality of service comparable to the PSTN while simultaneously providing broadband multimedia transmission capability.

14. Regarding **claim 5**, Gerszberg teaches all aspects of the claimed invention as set forth in the rejection of claims 1 and 3 but fails to expressly teach the bus interface with the DSP can be accessed both internally and externally.

Mannette discloses a system wherein said bus interfaced with said digital signal processing means can be accessed both internally and externally. (Figure 4, element 325 is access point for the bus, i.e. element 380, interfacing the DSP, element 340. Column 16, Lines 36-40).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Gerszberg's embodiment to have an encoder to convert telephone signals from digital to analog and vice versa. The motivation is a desire to provide a level or quality of service comparable to the PSTN while simultaneously providing broadband multimedia transmission capability.

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to show the state of the art with systems for multiple voice lines with data over a single subscriber loop:

US Patent (6, 747, 995) to Brown et al

US Patent (6, 584, 122) to Matthews et al

US patent (6, 839, 341) to Nakajima et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HM  
02-23-2005



HASSAN KIZOU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600